Cleaning unit
RLD

for cylindrical dust cartridges, Ø 328 mm

1. Features

The Filtration Group rotating wing is an extremely efficient cleaning system for dust collectors that enables the dust filter cake to be detached over the complete cartridge length. Depending on the application, the Filtration Group rotating wing can be supplied either in a standard steel version with a ball bearing or in a special stainless steel/aluminium version with plain bearing.

In combination with Filtration Group dust cartridges, the rotating wing represents an exceptionally effective and economical solution that is suitable for a wide range of applications.

Characteristics

- Extremely efficient
- Uniform cleaning
- Versions for both the untreated and cleaned gas sides
- Low noise level
- Minimal consumption of compressed air
- Careful cleaning of cartridges
- Low cleaning pressure
- Suitable for high differential pressure load
- Worldwide distribution
2. Function

During the filtration phase, the baffle plate is forced upwards by the flow. Dust particles are separated on the cartridge surface and a filter cake forms.

The cleaning pulse forces the baffle plate downwards and moves the cartridge out of the filtered fluid flow. At the same time, the rotating wing element is set in motion by the nozzle holes and the filter cake is detached by the fine pulsed air jets and the simultaneous vibratory movement in the cartridge pleats.

3. Technical data

Cleaning unit for dust cartridges with an outside diameter of 328 mm and an inside diameter of 216 mm.

**Standard version with ball bearing**
- Materials: Aluminium, galvanized steel, polyester
- Operating temperature: -20 °C to 100 °C

**Special version with plain bearing**
- Materials: Aluminium, stainless steel (1.4301), PTFE (plain bearing bush), silicone, Silikon
- Operating temperature: -40 °C to 200 °C

**Standard and special versions**
- Differential pressure via filter plate: up to max. 30 mbar*
- Cleaning medium: Oil, dust and condensate-free compressed air at operating temperature
- Compressed air connection: G¾ male
- Compressed air: 3 bar to 4 bar (max. 4.2 bar)
- Pulse duration: 0.5 s to 3 s (standard 1.5 s)

<table>
<thead>
<tr>
<th>Compressed air consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type designation</strong></td>
</tr>
<tr>
<td>RLD-32 03</td>
</tr>
<tr>
<td>RLD-32 06</td>
</tr>
<tr>
<td>RLD-32 10</td>
</tr>
<tr>
<td>RLD-32 12</td>
</tr>
</tbody>
</table>

* Depends on cartridge geometry

Technical data is subject to change without notice!
4. Ordering example

4.1 Type number key for cleaning units

Type of cleaning
- MJD Multi-jet nozzle for conical and cylindrical cartridges
- RLD Rotating wing for cylindrical cartridges
- RLK Rotating wing for conical cartridges

Cartridge diameter
- -12 120 mm
- -16 160 mm
- -32 328 mm

Cartridge length and mode of installation
- 00 Independent of length, installation for example via round thread or bayonet
- 03 300 mm, installation MJD/RLD via tie rod or RLK via Quick-Lock
- 06 600 mm, installation MJD/RLD via tie rod or RLK via Quick-Lock
- 10 1000 mm, installation MJD/RLD via tie rod or RLK via Quick-Lock
- 12 1200 mm, installation MJD/RLD via tie rod or RLK via Quick-Lock

Installation side of cartridge
- REIN Installation on cleaned gas side
- ROH Installation on untreated gas side

Versions
- A1 Nozzle aluminium or galvanized or coated steel, RLD/K with ball bearing
- V1 Nozzle aluminium or stainless steel, RLD with plain bearing
- V2 Stainless steel, RLD with plain bearing
- OS Only RLD/K with ball bearing without baffle plate, Nozzle aluminium or coated steel

RLD -32 12 ROH A1 Ordering example

4.2 Order numbers

<table>
<thead>
<tr>
<th>Order number</th>
<th>Cleaning unit</th>
<th>Cartridge model designation</th>
<th>Dimension L [mm]</th>
<th>Cartridge mounting</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>78296741</td>
<td>RLD-32 03 REIN A1</td>
<td>852 829 Ti...</td>
<td>300</td>
<td></td>
<td>Cartridge with closed end cap</td>
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<tr>
<td>78296758</td>
<td>RLD-32 06 REIN A1</td>
<td>852 781 Ti...</td>
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<td>78331878</td>
<td>RLD-32 03 ROH A1</td>
<td>852 826 Ti...</td>
<td>300</td>
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<td>Untreated gas side</td>
</tr>
<tr>
<td>78331852</td>
<td>RLD-32 06 ROH A1</td>
<td>852 908 Ti...</td>
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<td>Untreated gas side</td>
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<tr>
<td>78390106</td>
<td>RLD-32 10 ROH A1</td>
<td>852 909 Ti...</td>
<td>984</td>
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<td>Cartridge with reusable end cap</td>
</tr>
<tr>
<td>78331696</td>
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<td>852 908 Ti...</td>
<td>1208</td>
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</tr>
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</table>

* Ball bearing version, order numbers for plain bearing version on request.
** For more information, refer to the data sheets for the 328 NZ and 328 NZC dust cartridges.

5. Accessories

<table>
<thead>
<tr>
<th>Order number</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>79791104</td>
<td>Holding bolts PA6, pack of 3</td>
</tr>
<tr>
<td>77838568</td>
<td>Centre ring EL 033, galvanized steel</td>
</tr>
<tr>
<td>77934326</td>
<td>Centre ring EL 033, V2A stainless steel</td>
</tr>
<tr>
<td>77885031</td>
<td>Centre ring 2E 033, galvanized steel</td>
</tr>
<tr>
<td>78215220</td>
<td>Centre ring 2E 033, V2A stainless steel</td>
</tr>
<tr>
<td>76161913</td>
<td>Reusable end cap, galvanized steel</td>
</tr>
<tr>
<td>76161921</td>
<td>Reusable end cap, V4A stainless steel</td>
</tr>
</tbody>
</table>
6. Installation

Rotating wing versions can be supplied for installation on the untreated or cleaned gas side. A membrane valve must be provided on the pressure vessel for each cleaning unit. The cartridges are individually cleaned to ensure the least possible impairment to the volume flow and optimal cleaning results. The membrane valves can be controlled according to a preset time or a differential pressure limit.

Installation on the cleaned gas side
A hole with a diameter of 330 mm must be drilled in the filter plate.

Installation on the untreated gas side
A hole with a diameter of 210 mm must be drilled in the filter plate.

7. Design

Please contact us for detailed technical information, any open questions and for general expert advice. Completion of the relevant questionnaire would facilitate in the coordination of all important parameters. Comprehensive documentation on our product range, cleaning units and cartridges can be provided.